APPENDIX G:
NARRATION FOR TRACK 1 ON THE AUDIO CD

Narration for Track 1 on the NTIA ALE Clean Tone Audio CD

December 20, 1994

Note: L = Left channel, R = Right channel, B = both channels

L Short scanning call (8 TRW's): TO BOB (8), TIS TOM (1)
R Response: TO TOM (2), TIS BOB (1)
L Acknowledgement TO BOB (2), TIS TOM (1)

R The modem tones you just heard are the exchanges between two adaptive high frequency radios, using an eight-tone waveform. This new breed of radio is controlled by a smart computer box or circuit card known as an Automatic Link Establishment controller, commonly referred to as ALE. This all-digital audio Compact Disc provides a comprehensive set of ALE tones which can be used to test the Federal Standard 1045 protocols, functions, and addresses.

The Institute for Telecommunication Sciences, located in Boulder, Colorado, leads the development and publication of Telecommunication Standards for the Federal Government. As part of the National Telecommunications & Information Administration, under the U.S. Department of Commerce, we are proud to present technology of the new standards in a cost-effective manner. This Compact Disc may be played in a simple home CD player. Our goal is to provide an inexpensive means and fast method for industry and Government users to test and verify equipment interoperability with the Government ALE Standard.

This audio Compact Disc is provided under the sponsorship of the National Communications System in Washington, DC. It is accompanied by a 3.5 inch high density floppy disk, for use in portable computers running under IBM PC-DOS or Microsoft DOS. It is necessary to read the "README.1ST" file in the root directory of the 3.5 inch Floppy Disk before using this CD.

Manufacturers of ALE radios formed a group called the High Frequency Industry Association, known as HFIA. This industry group developed and approved a test plan in January 1993, which is included on the floppy disk. Additional documentation includes the PROTOCOL files used to make the audio disc. The complete layout of the compact disc, including the correspondence between the text files and CD tracks, is provided on the floppy disk.

The Institute hopes you will find this compact disc useful. We would appreciate your comments by completing the evaluation form found on the floppy disk.

Before you get started with this Compact Disc, here are some helpful technical tips.

Tip 1: Track 1 contains this narration on the right stereo channel only. The right channel of this CD provides information such as the tick mark time boundaries for net calls or the expected responses from the ALE radio being tested. The left channel on this CD is reserved for the tones from the originating radio. Normally the left channel output is routed to a voice actuated microphone input of a high frequency radio transceiver. The RF output is attenuated and coupled to the ALE radio system under test.

Tip 2: Track 2 contains a 30-second calibration tone of 1000 Hz. With a properly adjusted CD player, the frequency of this tone should measure better than 10 parts per million. Track 3 continues with all eight ALE tones in a step sequence.

Tip 3: Tracks 4 through 57 implement the approved HFIA test plan. Track 58 has a short sequence of degraded tone calls for Section 12 in the test plan. In Fiscal Year 1995, we plan to produce a complete set of compact discs with degraded tones as described in the Test Plan. The discs will test the relative performance of the HF ALE radios for a wide variety of simulated channel conditions.

We have added some optional tests beginning at track 59. These optional tests are simple Data Text Messages, and a call acceptance sound.